



STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950

December 4, 2007

Ms. Shirley J. Olinger, Manager Office of River Protection United States Department of Energy P.O. Box 450, MSIN: H6-60 Richland, Washington 99352 Mr. William S. Elkins, Project Director Bechtel National, Inc. 2435 Stevens Center Place, MSIN: H4-02 Richland, Washington 99354

Re: Submittal of Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit Design Package PTF-095, Revision 0, for the Waste Treatment and Immobilization Plant (WTP), submitted with letter 07-ESQ-059

Reference: Hanford Facility RCRA Permit, Dangerous Waste Portion for the Treatment,
Storage, and Disposal of Dangerous Waste, Part III, Operating Unit 10
(Waste Treatment and Immobilization Plant), WA7890008967

Dear Ms. Olinger and Mr. Elkins:

The Department of Ecology finds Design Package PTF-095 acceptable for inclusion in the WTP permit modification currently being prepared for Revision 9 of the Hanford Facility Dangerous Waste Permit.

Design Package PTF-095 provides details for the Pretreatment In-Cell Handling (PIH) System Decontamination Tank (PIH-TK-00001) and its associated jet pump and sparger assembly. The documents listed below are admitted for incorporation into the Permit and the Administrative Record:

For incorporation into the Permit:

- Appendix Number 8.2 Piping and Instrumentation Diagram (P&ID) 24590-PTF-M6-PIH-P0001, Revision 0.
 - 8.6 Mechanical Data Sheet 24590-PTF-M0D-PIH-P0015, Revision 2.
 - 8.6 Mechanical Drawings 24590-PTF-M0-PIH-P0019001, Revision 0 and 24590-PTF-M0-PIH-P0019002, Revision 0.
 - 8.8 Flooding Volume for Room P-0123A in the PT Facility 24590-PTF-PER-M-04-0007, Revision 0.
 - 8.9 Plant Item Material Selection Data Sheet 24590-PTF-N1D-PIH-P0001, Revision 0.
 - 8.11 Independent Qualified Registered Professional Engineer Independent Assessment Report CCN 139506, Revision 0.





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For incorporation into the Administrative Record:

System Description for Pretreatment In-Cell Handling System 24590-PTF-3YD-PIH-00001, Revision 0.

This package was submitted pursuant to Attachment 51, Appendix 1.0 WTP Interim Compliance Schedule. As allowed by Permit Condition III.10.C.2.g, Ecology will prepare and issue a draft permit modification in accordance with Washington Administrative Code (WAC) 173-303-830(3)(a)(ii) and WAC 173-303-840.

Ecology notes that the P&ID and the Mechanical Drawings in the Package indicate a basket strainer that closely fits the inner circumference of the PIH tank. This basket strainer was not procured, and Mechanical Data Sheet 24590-PTF-M0D-PIH-P0015 does not provide a material specification for it. Ecology finds that this basket functions as part of the PIH Decontamination Tank. If this basket is procured in the future, Ecology requires that the required information be submitted in compliance with Permit Condition III.10.C.2.g. This requirement does not apply to the smaller basket strainer (sized to fit inside a 55-gallon drum) that was procured with the PIH tank. The smaller basket functions as part of the Radioactive Solid Waste Handling System and is regulated under WAC 173-303 Generator requirements.

In addition to the PIH tank, further design information is required for dangerous waste activity planned in the Remote Decontamination Maintenance Cave, room P-0123A. Ecology anticipates that future design packages for this room will include, at a minimum, all information required under section III.10.E.9.d. for the PIH Decontamination Tank jumpers.

Ecology also notes that as the designs for this room mature, the items listed below may require permitting in accordance with the appropriate requirements of WAC 173-303 Final Status Treatment, Storage, or Disposal Facility requirements:

- Spray Decontamination Turntable (PIH-TTBL-00001), and its primary containment (catch pan), and jumpers.
- Size Reduction Area and its primary containment.
- Remote Repair Turntable (PIH-TTBL-00002), and its primary containment, and jumpers.
- Laydown Area and its primary containment.

The parties agree that during the transition period from permit drawings to engineering source drawings, items not requiring an installation inspection or inclusion in the Independent Qualified Registered Professional Engineer report may be shown in phantom. Ecology is approving the design changes identified in the Permittees' submittal. However, decisions regarding the regulation of items shown in phantom will be made at a later date. At the end of the transition period, permit submittals will contain engineering source documents and will be incorporated into the permit as described in Ecology Publication # 07-05-006 (www.ecy.wa.gov/biblio/nwp.html).

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If there are any questions, contact me at 509-372-7882 or Robbie Biyani at 372-7884.

Sincerely,

Brenda Becker-Khaleel WTP Permit Writer Nuclear Waste Program

bcs/jc

cc electronic:

Dave Bartus, EPA Nick Ceto, EPA John Eschenberg, USDOE Peter Garcia, USDOE Lori Huffman, USDOE Tony McKarns, USDOE Gae Neath, USDOE Don Sommer, USDOE William Taylor, USDOE Jan Brown, BNI Julie Colby, BNI Brad Erlandson, BNI Peggy Fisher, BNI Stan Hill, BNI Dennis Klein, BNI Sandi Murdock, BNI Phil Peistrup, WGI

cc: Stuart Harris, CTUIR
Gabriel Bohnee, NPT
Russell Jim, YN

Susan Leckband, HAB

Ken Niles, ODOE

Hanford Operating Record General File

Administrative Record: Waste Treatment Plant $\checkmark 4-o-8$

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